



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,946	02/25/2004	Alex Stolarz	8130.0096	9516
22852 7590 04/05/2007 FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP 901 NEW YORK AVENUE, NW WASHINGTON, DC 20001-4413			EXAMINER PATTERSON, MARC A	
			ART UNIT 1772	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/05/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/784,946

Applicant(s)

STOLARZ ET AL.

Examiner

Marc A. Patterson

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 26-42, 51, 52, 54-58, 60-62, 64-71 and 74-77 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

- 6) ☒ Claim(s) 26-42, 51, 52, 54-58, 60-62, 64-71 and 74-77 is/are rejected.

- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. 20070402.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

**NEW REJECTIONS**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 26 – 39, 41 – 42, 51 – 52, 54 – 58, 60 – 62, 64 – 66, 68 – 71, and 74 – 77 are rejected under 35 U.S.C. 102(b) as being anticipated by Flepp et al (U.S. Patent No. 6,555,243).

With regard to Claims 26 – 29, 33 – 42, 51 – 52, 54 – 58, 60 – 62, 64 – 71 and 74, Flepp et al disclose a hollow body (column 7, lines 65 – 67) with one intermediate layer formed on the basis of ethylene/vinyl alcohol copolymer (column 5, lines 19 – 21) and at least one inner and outer layer described by Flepp et al as an adhesive layer immediately adjacent to said intermediate layer (column 6, lines 25 – 30); the inner and outer layers consist of a polyamide molding composition mixture of polyamide 6, polyamide 12, and a compatibilizer (column 5, lines 32-33); the amount of polyamides in the inner and outer layers is between 25 – 80% by weight of polyamide 6 (column 5, lines 60 – 63), which is within the range of 40 – 60% (2:3 to 3:2) and 40 – 50% (2:3 to 1:1) by weight of polyamide 6 in Claims 33 and 34 of the instant invention, respectively; Flepp et al. discloses that the compatibilizer in the mixture is preferably up to 30% by weight (30 parts in weight; col. 6, lines 61-63), preferably 5 – 15% (5 to 15 parts in weight) by weight (column 6, Lines 61-63); Flepp et al. also disclose the use of rubbers for impact strength modifiers in the polyamide molding compositions (column 6, lines 33-37); the

Art Unit: 1772

acid-modified ethylene/olefins copolymers used as an impact strength modifier, can also be used as a compatibilizer (column 6, lines 50 – 56); the impact modifiers have elastomer fractions (column 6, lines 40-43); also disclosed by reference is the use of copolyamide 6/12 admixed with the ethylene/vinyl alcohol copolymer to decrease stress cracking which has the advantage of maintaining the barrier effect (column 3, lines 58 – 63); the inner layer (column 6, line 14) or additional inner layers (column 6, lines 17 – 18) are disclosed as having antistatic agents added so that the inner layer becomes electrically conductive (column 6, lines 13 – 17); additional additives such as pigments (column 6, line 67), stabilizers (column 7, line 1), reinforcement agents (column 7, line 1), and flame retardants (column 7, line 1) can also be added to the inner or additional inner layer; Flepp et al also discloses the addition of layered silicates (col. 7, line 10) to the ethylene/vinyl alcohol copolymer (column 7, line 18 – 20) to increase strength, strain at break, and other mechanical properties (column 7, lines 12-14); the thermoplastic multilayer composite is in the shape of tubing (column 1, line 14) such as for use in fuel lines (column 1, line 9) and fuel tank inlets (filler neck; column 7, line 62); the inner and outer layer are also the innermost layer and outermost layer of a multilayer composite consisting of the inner layer, outer layer and intermediate layer.

With regard to Claims 30 – 32, the applicant is introducing process limitations to the product claim, hence, the process claim is given little patentable weight due to the fact that the patentability of a product does not depend on its method of production.

With regard to Claims 75 and 76, the applicant is introducing the intended use of the thermoplastic multilayer composite; the limitations directed to intended use as a fuel line and

filler neck for a fuel tank are given little patentable weight. It is noted that Flepp et al discloses a fuel line (column 7, lines 62), and therefore inherently discloses a filler neck for a fuel tank.

With regard to Claim 77, Flepp et al disclose a supplemental inner layer that is an innermost layer (inner layer; column 6, lines 13 – 15) comprising a mixture of different polyamide homopolymers (column 5, lines 41 – 45) and an impact strength modifier which is also a compatibilizer (column 6, lines 45 – 56) and additives that lead to electrical conductivity (column 6, lines 13 – 17).

***Claim Rejections - 35 USC § 103***

3. Claims 40 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Flepp et al. (U.S. Patent No. 6,555,243).

Flepp et al disclose a polyamide comprising a compatibilizer as stated above. Flepp et al. discloses that the compatibilizer is in a range of 0-30% by weight (0-30 parts by weight) (column 6, lines 61-63). However, Flepp et al. fail to teach the entire claimed range, particularly the 30 – 35% by weight (30 – 35 parts by weight) of the instant invention. However, one of ordinary skill in the art at the time the invention was made would have recognized the advantage of varying the amount of the compatibilizer in the mixture to 35 parts by weight would be optimization through routine experimentation as taught by Flepp et al. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to optimize the concentration of the mixture of Flepp et al since the claimed range is overlapping.

#### ANSWERS TO APPLICANT'S ARGUMENTS

4. Applicant's arguments regarding the 35 U.S.C. 102(b) rejection of Claims 26 – 39, 41 – 42, 51 – 52, 54 – 58, 60 – 62, 64 – 66, 68 – 71, and 74 – 77 and as being anticipated by Flepp et al (U.S. Patent No. 6,555,243) and 35 U.S.C. 103(a) rejection of Claims 40 and 67 as being unpatentable over Flepp et al. (U.S. Patent No. 6,555,243), of record in the previous Action, have been carefully considered but have not been found to be persuasive for the reasons set forth below.

Applicant argues, on page 11 of the remarks dated January 18, 2007, that the adhesion promoting layers disclosed by Flepp et al are not innermost or outermost layers.

However, as stated above, the adhesion promoting layers are the innermost layer and outermost layer of a multilayer composite consisting of the inner layer, outer layer and intermediate layer.

Applicant also argues, on page 12, that Flepp et al do not disclose an innermost and outermost layer wherein the innermost and outermost layer comprise a mixture of different polyamide homopolymers and a compatibilizer.

However, as stated above, the adhesion promoting layers are the innermost layer and outermost layer of a multilayer composite consisting of the inner layer, outer layer and intermediate layer.

Art Unit: 1772

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc A Patterson whose telephone number is 571-272-1497.

The examiner can normally be reached on Mon - Fri 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Marc Patterson* 4/2/07  
Marc A. Patterson, PhD.  
Primary Examiner  
Art Unit 1772